

Notice of Allowability	Application No.	Applicant(s)	
	10/763,727	YAO ET AL.	
	Examiner	Art Unit	
	Craig A. Renner	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the telephone interview conducted on 29 September 2009.
2. ☒ The allowed claim(s) is/are 10-21 (renumbered 1-12, respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/282,999.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20090929a</u>. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|--|

/Craig A. Renner/
Primary Examiner, Art Unit 2627

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1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance.

During a telephone conversation conducted on 29 September 2009, Sumit Bhattacharya requested an extension of time for ONE MONTH and authorized the Director to charge Deposit Account No. 110600 the required fee of \$130.00 for this extension and authorized the following examiner's amendment.

Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

IN THE CLAIMS:

The claim listing has been amended to read as follows:

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1-9. (Cancelled).

10. (Currently Amended) An actuator component comprising:
at least one layer of electrically-conductive material; and
at least one layer of electrically-insulative material, wherein
said conductive material and said insulative material are to be applied to
an actuator finger one layer upon another in an alternating manner wherein the
last layer applied is a conductive material layer, ~~the last conductive material layer~~
~~comprising a gap,~~ and

said layer of insulative material is wider than said layer of conductive
material such that an insulative layer, applied to said actuator finger and
sandwiching a conductive layer between said insulative layer and said actuator
finger, at least partially encloses and electrically isolates said conductive layer
latitudinal to said actuator finger, and wherein a first bonding pad is placed ~~in the~~
~~gap of~~ on the last conductive material layer, and a second bonding pad and a
third bonding pad are placed on opposite ends of the actuator finger.

11. (Previously Presented) The actuator component of claim 10, wherein said
conductive material is a metal.

12. (Previously Presented) The actuator component of claim 11, wherein said
conductive material is from the group consisting of Gold, Platinum, and Copper.

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13. (Previously Presented) The actuator component of claim 10, wherein said insulative material is a piezoelectric ceramic material.

14. (Previously Presented) The actuator component of claim 13, wherein said insulative material is lead zirconate titanate.

15. (Previously Presented) The actuator component of claim 10, wherein said actuator finger is a hard disk drive micro-actuator finger.

16. (Currently Amended) A piezoelectric actuator comprising:

an actuator finger to receive application of at least one layer of electrically-conductive material and at least one layer of electrically-insulative material, said application being one layer upon another in an alternating manner wherein the last layer applied is a conductive material layer, ~~the last conductive material layer comprising a gap,~~ wherein

said layer of insulative material is wider than said layer of conductive material such that an insulative layer, applied to said actuator finger and sandwiching a conductive layer between said insulative layer and said actuator finger, at least partially encloses and electrically isolates said conductive layer latitudinal to said actuator finger, and wherein a first bonding pad is placed ~~in the gap of~~ on the last conductive material layer, and a second bonding pad and a third bonding pad are placed on opposite ends of the actuator finger.

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17. (Previously Presented) The piezoelectric actuator of claim 16, wherein said conductive material is a metal.

18. (Previously Presented) The piezoelectric actuator of claim 17, wherein said conductive material is from the group consisting of Gold, Platinum, and Copper.

19. (Previously Presented) The piezoelectric actuator of claim 16, wherein said insulative material is a piezoelectric ceramic material.

20. (Previously Presented) The piezoelectric actuator of claim 19, wherein said insulative material is lead zirconate titanate.

21. (Previously Presented) The piezoelectric actuator of claim 16, wherein said actuator finger is a hard disk drive micro-actuator finger.

22-28. (Cancelled).

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Tuesday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Craig A. Renner/
Primary Examiner, Art Unit 2627

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